CONTENTS

Volume 42 Number 1 1977

W. Admiraal
Influence of Various Concentrations of Orthophosphate on the Division Rate of an Estuarine Benthic Diatom, *Navicula arenaria*, in Culture 1

I. M. Munda, B. P. Kremer
Chemical Composition and Physiological Properties of Fucoids under Conditions of Reduced Salinity 9

B. R. Berland, D. J. Bonin, O. J. Guérin-Ancey, V. I. Kapkov, D. P. Arlhac
Action de métaux lourds à des doses sublétales sur les caractéristiques de la croissance chez la diatomée *Skeletonema costatum*. [Action of Sublethal Doses of Heavy Metals on the Growth Characteristics of the Diatom *Skeletonema costatum*] 17

T. M. Dillon
Effects of Acute Changes in Temperature and Salinity on Pulsation Rates in Ephyrae of the Scyphozoan *Aurelia aurita* 31

M. J. Loeb, G. Walker
Origin, Composition, and Function of Secretions from Pyriform Organs and Internal Sacs of Four Settling Cheilo-Ctenostome Bryozoan Larvae 37

G. Gust
Turbulence and Waves Inside Flexible-Wall Systems Designed for Biological Studies 47

B. Kimor, B. Golandsky
Microplankton of the Gulf of Elat: Aspects of Seasonal and Bathymetric Distribution 55

S. Richman, D. R. Heinle, R. Huff
Grazing by Adult Estuarine Calanoid Copepods of the Chesapeake Bay 69

B. R. Lassig
Communication and Coexistence in a Coral Community 85

Volume 42 Number 2 1977

T. Becacos-Kontos
Primary Production and Environmental Factors in an Oligotrophic Biome in the Aegean Sea 93

R. Rosenberg, I. Olsson, E. Ölundh
Energy Flow Model of an Oxygen-Deficient Estuary on the Swedish West Coast 99

R. A. Moll
Phytoplankton in a Temperate-Zone Salt Marsh: Net Production and Exchanges with Coastal Waters 109

D. J. Barnes, C. J. Crossland
Coral Calcification: Sources of Error in Radioisotope Techniques 119

K. Gocke
Comparison of Methods for Determining the TurnoverTimes of Dissolved Organic Compounds 131

V. N. de Jonge, L. A. Bouwman
A Simple Density Separation Technique for Quantitative Isolation of Meiobenthos Using the Colloidal Silica Ludox-TM 143

M. R. Roman
Feeding of the Copepod *Acartia tonsa* on the Diatom *Nitzschia closterium* and Brown Algae *(Fucus vesiculosus)* Detritus 149

K. E. Mshigeni
The Morphology and Distribution Ecology of *Corynomorpha prismatica:* A Red Seaweed of Potential Economic Significance in Southeast Tanzania 157

K. E. Mshigeni, W. S. M. Lorri
Spore Germination and Early Stages of Development in *Hypnea musciformis* (Rhodophyta, Gigartinales) 161

A. K. Semesi, K. E. Mshigeni
Studies on the Content and Nature of the Phycocolloid from *Corynomorpha prismatica* (Rhodophyta, Cryptonemiales) 165

R. Ralph, J. G. H. Maxwell
Growth of Two Antarctic Lamellibranchs: *Adamussium colbecki* and *Laternula elliptica* 171

N. Haven
The Reproductive Biology of *Nautilus pompilius* in the Philippines 177

Corrigendum Notice 185

Volume 42 Number 3 1977

R. P. Harris, V. Berdugo, S. C. M. O'Hara, E. D. S. Corner
Accumulation of ^{14}C-1-Naphthalene by an Oceanic and an Estuarine Copepod during Long-Term Exposure to Low-Level Concentrations 187

H. R. Skjoldal, U. Båmstedt
Ecobiochemical Studies on the Deep-Water Pelagic Community of Korsfjorden, Western Norway. Adenine Nucleotides in Zooplankton 197

W. J. Wiebe, D. F. Smith
Direct Measurement of Dissolved Organic Carbon Release by Phytoplankton and Incorporation by Microheterotrophs 213

C. A. Price, J. M. St. Onge-Burns, J. B. Colton, Jr., J. E. Joyce
Automatic Sorting of Zooplankton by Isopycnic Sedimentation in Gradients of Silica: Performance of a "Rho Spectrometer" 225

L. Dalla Venezia, V. U. Fossato
Characteristics of Suspensions of Kuwait Oil and Corexit 7664 and Their Short- and Long-Term Effects on *Tisbe bulbisetosa* (Copepoda: Harpacticoida) 233

G. Anderson
The Effects of Parasitism on Energy Flow through Laboratory Shrimp Populations 239

J. T. Beck
Reproduction of the Estuarine Mysid *Taphromysis bowmani* (Crustacea: Malacostraca) in Fresh Water 253

S. C. Hand, W. B. Stickle
Effects of Tidal Fluctuations of Salinity on Pericardial Fluid Composition of the American Oyster *Crassostrea virginica* 259

J. C. Ogden, P. R. Ehrlich
The Behavior of Heterotypic Resting Schools of Juvenile Grunts (Pomadasyidae) 273

Volume 42 Number 4 1977

T. C. Malone
Light-Saturated Photosynthesis by Phytoplankton Size Fractions in the New York Bight, USA 281

J. Ramus, F. Lemons, C. Zimmerman
Adaptation of Light-Harvesting Pigments to Downwelling Light and the Consequent Photosynthetic Performance of the Eulittoral Rockweeds *Ascophyllum nodosum* and *Fucus vesiculosus* 293

K. Schmitz, B. P. Kremer
Carbon Fixation and Analysis of Assimilates in a Coral-Dinoflagellate Symbiosis 305

B. J. Davis
Distribution and Temperature Adaptation in the Teleost Fish Genus *Gibbonsia* 315

R. B. Hanson, W. J. Wiebe
Heterotrophic Activity Associated with Particulate Size Fractions in a *Spartina alterniflora* Salt-Marsh Estuary, Sapelo Island, Georgia, USA, and the Continental Shelf Waters 321

E. A. Caine
Feeding Mechanisms and Possible Resource Partitioning of the Caprellidae (Crustacea: Amphipoda) from Puget Sound, USA 331

P. S. Rainbow, G. Walker
The Functional Morphology and Development of the Alimentary Tract of Larval and Juvenile Barnacles (Cirripedia: Thoracica) 337

H. Weikert
Copepod Carcasses in the Upwelling Region South of Cap Blanc, N. W. Africa 351

C. H. Saloman, S. P. Naughton
Effect of Hurricane Eloise on the Benthic Fauna of Panama City Beach, Florida, USA 357

T. M. Niesen
Reproductive Cycles in Two Populations of the Pacific Sand Dollar *Dendraster excentricus* 365

E. Shulenberger
Hyperiid Amphipods from the Zooplankton Community of the North Pacific Central Gyre 375

Indexed in Current Contents